Generation Alpha: Challenges and Strategies of Teachers Based on Behavioristic Theory

Niki Desvidisa Aryani*
University State of Jakarta, Jakarta, Indonesia
E-mail : niki.desvidisa@mhs.unj.ac.id

Arita Marini
University State of Jakarta, Jakarta, Indonesia
E-mail : aritamarini@unj.ac.id

Edwita
University State of Jakarta, Jakarta, Indonesia
E-mail : edwita@unj.ac.id

Durotul Yatimah
University State of Jakarta, Jakarta, Indonesia
E-mail : dyatimah@unj.ac.id

Linda Zakiah
University State of Jakarta, Jakarta, Indonesia
E-mail : lindazakiah@unj.ac.id

Abstract

The alpha generation is another term for children born in 2010 to 2025. The alpha generation is closely related to the use of technology products, especially gadgets. Therefore, this generation is also called the digital generation. Technology offers many benefits to humans, but technology can also create opportunities for students to exhibit deviant behavior. This is a special concern for teachers because it can affect the development and change of student behavior, especially basic education students. Therefore, teachers need to know what challenges and strategies can be applied in dealing with students from the alpha generation. Therefore, this study aims to identify challenges and strategies that can be applied by teachers in dealing with this generation of students based on behavioristic theory. This research is qualitative research with the method used is a literature study. Data is obtained from journals, articles, books and other documentation related to this topic. Based on the analysis of the results of the literature study, it was found that the challenges faced by teachers are related to mastery of technology and teachers' creativity in creating innovative and differentiated learning and becoming inspiring mentors for students. With this research, it is hoped that it can be knowledge for teachers in dealing with students at school based on its characteristics. So that the learning process and knowledge transfer can run well and achieve national education goals.

Keywords*: challenge, strategy, teacher, alpha generation, behavioristic theory*

Abstrak

Generasi alpha merupakan sebutan lain dari anak-anak yang lahir pada tahun 2010 hingga tahun 2025. Generasi alfa erat kaitannya dengan penggunaan produk teknologi, terutama gadget. Oleh sebab itu generasi ini disebut juga dengan generasi digital. Teknologi menawarkan banyak manfaat bagi manusia tapi teknologi juga dapat menciptakan kesempatan bagi siswa untuk menunjukkan perilaku yang menyimpang. Ini menjadi perhatian khusus bagi guru karena dapat mempengaruhi perkembangan dan perubahan perilaku siswa terutama siswa pendidikan dasar. Oleh karena itu, guru perlu mengetahui tantangan serta strategi apa saja yang dapat diterapkan dalam menghadapi siswa dari generasi alpha. Maka, penelitian ini bertujuan untuk mengidentifikasi tantangan dan strategi yang dapat diterapkan oleh guru dalam menghadapi siswa generasi ini berdasarkan teori behavioristik. Penelitian ini merupakan penelitian kualitatif dengan metode yang digunakan adalah studi pustaka. Data diperoleh dari jurnal, artikel, buku dan dokumentasi lain yang terkait dengan topik ini. Berdasarkan analisis hasil studi pustaka didapatkan bahwa tantangan yang dihadapi guru adalah terkait penguasaan teknologi dan kreativitas guru dalam menciptakan pembelajaran

yang inovatif dan berdiferensiasi serta menjadi mentor yang menginspirasi bagi siswa. Dengan adanya penelitian ini, diharapkan dapat menjadi pengetahuan bagi guru dalam menghadapi siswa-siswa disekolah berdasarkan karakteristiknya. Sehingga proses pembelajaran dan transfer ilmu dapat berjalan dengan baik dan mencapai tujuan pendidikan nasional.

Kata Kunci: *tantangan, strategi, guru, generasi alpha, teori behavioristik*

Introduction

Education and technology continue to develop rapidly. The development of education in the world cannot be separated from technological developments, on the contrary, technological developments are also the results of research and discoveries based on awareness to facilitate human activities until then technology and education complement each other. Technology as a tool and education as a strengthening of humanity so that technological progress will be directly proportional to harmony and peace.

Education as a forum for repeating science needs to be in harmony with the conditions of society that are currently undergoing changes. As we know, the role of technology has affected people's lives both in the industrial field and in social life. For example, in the 18th century steam engines were invented which later brought about major changes in the industrial field of people who worked relying on muscle power, wind power and hydropower to move using steam engines to carry out their production activities. The discovery is evidence of the beginning of the industrial revolution era (Industrial Revolution 1.0). Then the development of innovation and technology continued in the 19th century with the invention of electricity called the industrial revolution 2.0. Furthermore, in the 1970s, computers began to be used (industrial revolution 3.0). Until it developed into the industrial revolution 4.0 which began around 2010 with the introduction of intelligent engineering or AI and the internet of things as a feature of human movement and connectivity with machines.

Technology does provide many benefits for humans, but technology can also create opportunities for students to show deviant behavior [1]. This is a special concern because it can affect the development and behavior change of students, especially basic education students who are in dire need of guidance[2]. As teachers, they must be responsive to changes and developments that occur, especially in educating and preparing students who will live in the era of the 4.0 revolution [3]. The generation living in this era is also called the alpha generation (Gen A). Gen A is the generation born in 2010 until now. Some of this generation-have entered primary school [4]. Meanwhile, the teachers who teach these students are some of the X generation who are not too proficient in mastering technology [5]. The alpha generation is used to the use of technology in daily

---

[1] Adnane Derbani, Wiwiek Rabiatul Adawiyah, and Siti Zulaikha Wulandari, 'Impact of Online Buying Behavioral Tendencies of Generation Z on Their Parents' Consumption Behavior: Insight from Indonesia', *Innovative Marketing*, 18.2 (2022), 39–48 <https://doi.org/10.21511/im.18(2).2022.04>.

[2] Mickie Wong-Lo and Clarissa Chan, 'IForgive: The Exploration of Forgiveness in Cyberbullying', *The Psychology of Cyberbullying*, 2024, 245–56; Happy Children, *Education and Child Safety*, 2020 <https://doi.org/10.1787/421bcc05-en>.

[3] Agnieszka Sekala and others, 'Technical Education for Industry 4.0: Generation Z's Motivation to Study Technical Subjects - a Comparative Study of Selected Universities in Denmark and Poland', *EAEEIE 2023 - Proceedings of the 2023 32nd Annual Conference of the European Association for Education in Electrical and Information Engineering*, 2023, 10181671 <https://doi.org/10.23919/EAEEIE55804.2023.10181671>.

[4] Asiva Noor Rachmayani, 'No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析 Title', 2015, 6.

[5] Ergün Akgün, 'Data Literacy to Understand Generation Alpha', *The Teacher of Generation Alpha*, 2020, 133–43.

life and all information is very accessible. However, in the midst of technological advancements, it is also hoped that it will be in line with the development of student behavior. There are many cases of elementary school children today who are deviated due to the influence of technology.

Learning is the main key in an educational process. The educational process is very important for students to go through, because it is related to the quality of graduates from the education. In the learning process, there is interaction between teachers and students in achieving educational goals. Therefore, it is necessary to have the right and appropriate learning theory so that learning goals can be achieved. Learning theory is the relationship of principles, explanation of facts and discoveries related to learning. The use of appropriate learning theories will make it easier for students to understand learning. It is also supported by a comfortable, conducive and fun learning environment and conditions. In fact, learning is a process of behavior change. A person is considered to have learned if there has been a change in behavior. Students will easily learn if the development procedure in the learning concept and the choice of material chosen and the media used are appropriate. The quality of the multimedia applied will be largely determined by the relationship between learning theory, learning design, and lesson metering. Generally, a new concept will complement the old one. The emergence of old concepts has motivated many experts to complement and refine them so that new concepts emerge that are modern and considered very relevant.

Based on this, behavioristic theory has a correspondence with this phenomenon. The orientation of behavioristic learning concepts is that the results can be observed, measured, analyzed, and can be objectively tested. Therefore, teachers need to know the characteristics of alpha generation students and identify what challenges they face so that they can design strategies in dealing with alpha generation students in accordance with behavioristic theory. Based on research, behavioristic theory is a learning theory that emphasizes more on behavior change and as a result of the interaction between stimuli and responses. According to behavioristic learning theory, learning is a process of behavior change as a result of the interaction between stimuli and responses. A person is considered to have learned if he can show a change in his behavior. The application of behavioristic theory in learning activities depends on several things such as: learning objectives, nature of subject matter, characteristics of learners, available learning media and facilities[6]. Several studies have also shown that behavioristic theory has a strong influence on changes in students' learning behavior[7], providing students with the ability to make decisions[8], the ability to behave in social interaction[9].

Therefore, the purpose of this research is to find out the characteristics of alpha generation students and to know the challenges and strategies of teachers in dealing with them based on behavioristic theory. Based on these objectives, the formulation of the problem is:

1. What are the characteristics of alpha generation students?
2. What are the challenges of teachers in dealing with alpha generation students?

---

[6] Bakhrudin All Habsy and others, 'Penerapan Teori Belajar Behaviorisme Dan Teori Belajar Sosial Bandura Dalam Pembelajaran', *Tsaqofah*, 4.1 (2023), 476–91 <https://doi.org/10.58578/tsaqofah.v4i1.2211>.

[7] Stevi Magiananta and others, 'Analisis Teori Behavioristik Dalam Proses Pembelajaran Matematika Pada Siswa MTs Bahrul Ulum Genukwatu', 5475 (2024), 1–8.

[8] Ivan Moscati, 'Behavioural and Heuristic Models Are As-If Models Too – and That's Ok', *Economics and Philosophy*, 2023, 1–31 <https://doi.org/10.1017/s0266267123000093>.

[9] Ilaria Cozzaglio, 'Revised Normative Behaviourism: An Experimental Proposal', *Res Publica*, 0123456789, 2024 <https://doi.org/10.1007/s11158-024-09682-y>.

3. What are some strategies that teachers can do to overcome these challenges?

Research Method

This study uses a literature study method. The literature study in this study is a series of activities related to the method of collecting library data, reading and taking notes, and managing research data objectively, systematically, analytically, and critically about the challenges and strategies of teachers in dealing with alpha gene students based on behavioristic theory. Sources and methods of data collection by taking data in the library, reading, recording, and processing research materials from research articles. The data collected and analyzed is secondary data in the form of research results such as books, journals, articles, internet sites, and other relevant data. Furthermore, the data analysis technique in this study uses the content analysis data analysis technique. Data analysis begins by analyzing the results of the research from the most relevant, relevant and quite relevant. Then by looking at the research year starting from the most up-to-date, and gradually retreating to an older year.

Findings and Discussion

Findings

Based on data analysis, it was found that the alpha generation has the characteristics of mastering technology, easily obtaining information, not liking to be pressured by rules, having high confidence, liking instant things and always wanting to be recognized (Figure 1).
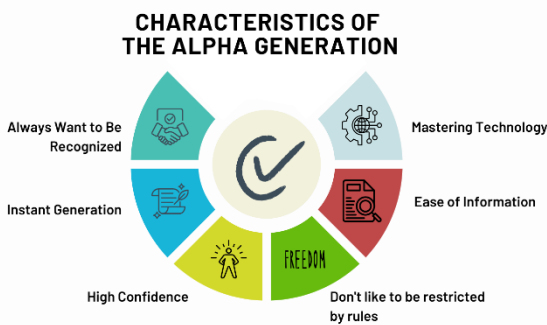

Figure 1. Characteristics of the Alpha Generation

The results of the data analysis resulted in several challenges faced by teachers in dealing with alpha generation students, namely teachers must adapt and master technology, students tend not to focus on learning, differences in student learning styles, must prepare students to be globally competitive and must be mentors and inspirations for students (Figure 2).
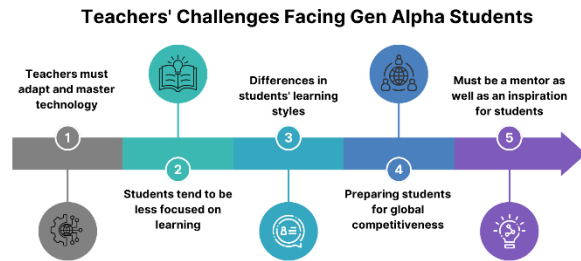

Figure 2. Teachers' Challenges Facing Gen Alpha Students

Based on these challenges, the strategies that can be carried out by teachers are that teachers must participate in various technology mastery trainings, implement interesting and innovative learning models, apply multimodal and differentiated approaches, guide students to master 21st century skills and help students in solving problems, especially learning problems (Figure 3).
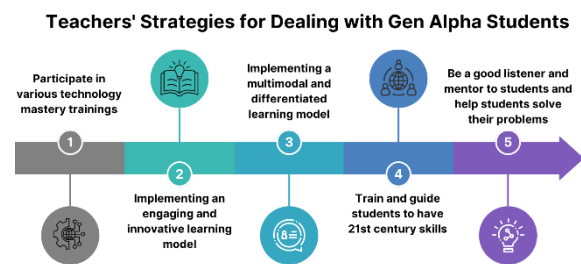
Figure 3. Teachers' Strategies for Dealing with Gen Alpha Students

Disscusion

Behavioristic Learning Theory

Learning is a form of behavior change that occurs in students as a result of the relationship between stimulation and response. Learning has the goal of changing a person's behavior after experiencing the learning process. A person can be said to have learned if he has shown a change in his behavior. In education, the change in question

is not only related to behavioral changes but changes from all aspects including improved learning outcomes (cognitive and psychomotor) and life experience.

Behavioristic theory was initiated by Gage and Berlier who study changes in a person's behavior based on learning experiences. After that, this theory developed into a school in learning psychology. In its development, it turns out that this theory also affects the learning or education of students at school. Regarding behavior change as a learning outcome, learning theory no longer discusses how the process occurs but explains why the student's behavior changes. According to behavioristic theory, the change in behavior occurs due to stimulus and response accompanied by reinforcement [10]. Changes in behavior can also be observed by teachers and the surrounding environment. The teacher provides a stimulus to the student and the result or reaction of the student is a response to the stimulus. Behavioristic theory positions students as passive individuals. The response will appear if habituation is carried out and will be stronger if reinforcement is given on the other hand, it will be weak if punished (punishment). This is an important factor in the application of behavioristic theory. The implementation of behavioristic theory aims to maximize the learning process in achieving learning goals, namely students show behavioral changes in accordance with learning goals. This theory is also known as S-R (stimulus-response) in psychology which is influenced by rewards and reinforcements from teachers and the surrounding environment [11]. The characteristics of behavioristic theory are; 1) behavior is a psychological object; 2) responses are returned on

all forms of behavior; 3) factors that help habits are considered very important; 4) the environment greatly influences the formation of behavior; 5) visible behavior is emphasized using objective methods; 6) automatic-mechanical in nature. Gage and Berliner also put forward the principles of behavioristic theory, namely: 1) reinforcement; 2) punishment; 3) primary anda secondary reinforcement; 4) schedules of reinforcement; 5) contingency management; 6) stimulus control in operant learning; 7) the elimination of respons [12][13]. The initiators of behavioristic theory include John Broades Watson, Edwin Ray Guthrie, Clark Leaonard Hull, Edward Lee Thorndike, and Burrhusm Frederic Skinner. Some figures have different opinions in behavioristic theory. Although they have differences in behavioristic theory, they agree on the meaning of learning as a change in behavior. This research focuses on the theory of learning behavior initiated by BF Skinner.

BF Skinner is one of the psychologists who initiated the theory of behavioristic learning from the United States. Skinner argues that behavior changes can occur as a result of the interaction of the relationship between stimuli and responses [14]. Skinner is also known for his directed instruction model approach. As a behavioristic figure, Skinner believed that behavior can be controlled by operant conditioning)[15][16]. Operant conditioning is a learning process or learning method that uses rewards and punishments to change student behavior. In operant conditioning, the behavior of students who are rewarded tends to be repeated continuously, while behaviors that are punitive tend to be less or less common. This behavior is also spontaneous and free[17].

---

[10] Ivan Moscati, 'Behavioural and Heuristic Models Are As-If Models Too – and That's Ok', *Economics and Philosophy*, 2023, 1–31 <https://doi.org/10.1017/s0266267123000093>.

[11] Moscati.

[12] Moscati.

[13] Thomas M. Leeder, 'Behaviorism, Skinner, and Operant Conditioning: Considerations for Sport Coaching

Practice', *Strategies*, 35.3 (2022), 27–32 <https://doi.org/10.1080/08924562.2022.2052776>.

[14] Leeder.

[15] Charles N. Cofer and B. F. Skinner, *The Technology of Teaching, The American Journal of Psychology*, 1969, LXXXII <https://doi.org/10.2307/1420451>.

[16] Leeder.

[17] Leeder.

During his 60-year career in psychology, Skinner identified some of the fundamental principles of operant conditioning about how a person learns new behaviors or changes their behaviors. The procedure for behavior formation in operant conditioning according to Skinner is as follows:

1) Reinforment

Skinner explained in his theory that the learning process consists of three elements, namely stimulus, reinforcement and response. The concept of reinforcement is applied during the conditioning process so that this reinforcement is very important for teachers to do so that behavior changes occur in students. Reinforcement is a process to strengthen behaviors that will be formed or have been formed so as to increase the chance of positive behavior occurring again repeatedly so that it is formed into a habit[18].

Generally, strengthening is divided into two categories, namely positive strengthening and negative strengthening. The most effective method is positive reinforcement to control the behavior of both animals and humans. Positive reinforcement for human beings consists of basic needs such as food, drink, and physical needs and those that are positive reinforcements such as material, money, friendship, praise, attention, rewards and a successful career. Negative reinforcement is a way of providing behavioral reinforcement by eliminating unpleasant stimulation. There are two types of negative reinforcement, namely overcoming and avoiding. The first type is coping, namely by eliminating unpleasant stimuli and the second type is avoiding the unpleasant stimuli[19].

2) Punishment

If reinforcement can strengthen behavior, then punishment can weaken or reduce the chance of behavior happening again. Punishment is divided into two types, namely, positive punishment and negative punishment. Positive punishment is to reduce behavior by providing unpleasant stimuli if the behavior occurs. Negative punishment is also called elimination, which is the reduction of behavior by eliminating pleasant stimuli if behavior occurs[20].

3) Shaping

The shaping process is a process of slowly changing behavior by providing stimulus and referring to the desired response, then strengthened by providing reinforcement so that it can strengthen the expected behavior. The behavior formation procedure begins with the reinforcement of the responses shown by the students. With shaping, it is hoped that student behavior can be formed properly and intact if done slowly. Shaping is a reinforcement technique to teach behavior that has never been done before. Teachers begin to provide reinforcement when a student response occurs and begin to gradually increase the level of difficulty according to the response needed.

For example, like research that has been conducted in teaching rats to press the lever located above their heads, first the trainer gives a reward if the rat moves any head upwards then moves upwards 2.5 cm and so on until it is able to press the lever. Psychologists also use this method (shaping) to train children with severe mental retardation to learn to speak, namely by giving a reward if they make any sound and then gradually making the sound like the word spoken by the teacher[21].

---

[18] Leeder; Brent Slife and Richard Williams, 'Science and Human Behavior', *What's Behind the Research? Discovering Hidden Assumptions in the Behavioral Sciences*, 2014, 167–204 <https://doi.org/10.4135/9781483327372.n6>.

[19] Leeder; Paul Ziff, 'About Behaviorism', *Analysis (United Kingdom)*, 18.6 (1958), 132–36 <https://doi.org/10.1093/analys/18.6.132>.

[20] Leeder; Ziff.

[21] Leeder; Ziff.

4) Behaviors modification

Behavior modification is a strategy carried out to change the behavior of problematic students. The way to modify the behavior that Skinner does is to change the behavior and shape the behavior according to the desired or learning purpose. In modifying student behavior, tested learning principles are applied[22].

5) Generalization discrimination

Generalizations and discrimination that occur in operant conditioning are almost the same as classical conditioning. In generalization, the goal is so that behavior can be repeated or more widespread even though the stimulus situation is different. The generalization of stimulus is important for the credibility of student behavior. Meanwhile, discrimination is the process of learning behavior in situations but not in other situations or behaving according to situations and conditions. For example, learning not to joke or give jokes when worshipping. Descriptive stimulation is a form of behavioral warning whose reinforcement is negative. A person will learn to give jokes and jokes only when they are in a relaxed situation with a lot of people (descriptive stimulation). The reinforcement factor is very important in the learning process of students in operant condition[23] [24] [25].

In the pattern of stimulation and response, Skinner has a belief that behavior in conditioned states. Skinner's analysis of operant behavior or deliberate behavior differed from his predecessor regarding classical conditioning. The procedure for conditioning operant behavior consists of: 1) positive reinforcement in the form of a large reward is likely to be repeated in response; 2) negative reinforcement in the form of an unwanted situation and is likely to be repeated, for example the response is pain and disappointment; 3) stopping reinforcement will make the response not repeat because it is not reinforced; 4) punishment, which is a response that makes you disappointed or painful so that the consequences given are increasingly suppressed. "The commonest technique control in modern life is punishment. The pattern is familiar, if a man doesn't behave as you wish, knock him down; if a child is mis behaves, spank him[26] [27].

Skinner says that the most common control technique practiced in modern life is to administer punishment[28]. The pattern is familiar, if someone does not behave the way we want them to, hit him; If a child behaves badly, then beat him. Skinner provides recommendations for the use of measures to strengthen aspects of behavior, such as paying full attention to stimulation and researching appropriate behaviors. If the student shows an emotional response and does not show good behavior, then the punishment must be set aside first because it needs a positive approach and reinforcement. However, Skinner's behavioristic theory also has its drawbacks.

The weaknesses of Skinner's behavioristic theory are:

1) The learning process is considered to be observant even though it is not that easy because learning is a mental activity that is quite difficult to see and measure from the outside; 2) the learning process is considered automated-mechanical (can be tinkered) even though students have the

---

[22] Leeder; Ziff.

[23] Leeder; Ziff.

[24] Thomas M. Leeder, 'Behaviorism, Skinner, and Operant Conditioning: Considerations for Sport Coaching Practice', *Strategies*, 35.3 (2022), 27–32 <https://doi.org/10.1080/08924562.2022.2052776>.

[25] Paul Ziff, 'About Behaviorism', *Analysis (United Kingdom)*, 18.6 (1958), 132–36 <https://doi.org/10.1093/analys/18.6.132>.

[26] Cofer and Skinner, LXXXII.

[27] Charles N. Cofer and B. F. Skinner, *The Technology of Teaching*, *The American Journal of Psychology*, 1969, LXXXII <https://doi.org/10.2307/1420451>.

[28] Andrea Zagaria and Luigi Lombardi, 'A New Perspective on Trends in Psychology', *New Ideas in Psychology*, 74.March (2024), 101078 <https://doi.org/10.1016/j.newideapsych.2024.101078>.

capacity to manage themselves such as their knowledge (cognitive) so that they can reject or accept the response; 3) Theoretical experiments are mostly carried out on animals such as rats so that they are generalized to humans as well where in the learning process humans are likened to having animal-like behavior that is difficult to obtain because they have different psyche and physical[29].

Characteristics of the Alpha Generation

In a paper published by McCrindle, an Australian-based social organization, he explains how the term Alpha Generation was formed. In 2005 in the United States, the list of alphabet names was exhausted, so scientists looked at the Greek letters to be used as a designation that sociologists then followed in naming generations[30]. At that time, most demographers were busy profiling young Zed (before naming Generation Alpha) so the analysis of this generation went from the foundation stage to consolidation. This formed a more predictable labeling system as we know it today. There is a consensus regarding the alphabet theme of Generation X, Y, Z, it is likely that the new generation will be known as Generation Alpha. Those born globally from 2010-2025 have been labeled Generation Alpha. This labeling is also in accordance with Strauss and Howe's Generation Theory where it is predicted that Generation Alpha will spend their childhood at the point of their glory because they have passed through the global recession, the crisis of theorism, climate change, the issue of food shortages or rising house prices has also subsided. McCridle also conducted a survey regarding suitable names after Generation Z, it turned out that the survey results showed that the suitable names were the Alpha generation (Gen A). The striking reason is to go back to the beginning, which is the letter A (Gen A) which means starting from the beginning. This is also a hope for this generation with a new beginning that will have a positive impact on many people. The emergence of the term alpha generation also gives rise to a new variable that provokes researchers to study from all aspects [31].

Generation alpha (Gen A) are children born between 2010 and 2025[32] [33]. The current alpha generation is 12 years old, which means they have started to enter junior high school. They were born at a time when technology was experiencing rapid development, so it is not surprising that children from this generation are very closely related to the use of gadgets. The alpha generation was born from generations Y and Z or called the millennial generation. Where generations Y and Z were born at a time when technology was developing, while the technology of the alpha generation was very advanced. If we look at it, generations Y, Z and A have something in common, namely living in the era of technology, it's just that generations Y and Z know technology when they are in their 20s, while the alpha generation at birth has all aspects related to technology. As during the covid 19 pandemic, the alpha generation had to learn online at their respective homes, which required parents to be able to adapt to change. The presence of the alpha generation is very feared by the previous generation because it is considered smarter and more adaptable to technology. The characteristics of the alpha generation are as follows:

1. **Mastering Technology**

   The Alpha Generation is the first generation born in the 21st century. They live in an environment that is familiar with digital

---

[29] Zagaria and Lombardi.

[30] Graeme Perry, 'Generation Alpha: Understanding Our Children and Helping Them Thrive', *TEACH Journal of Christian Education*, 16.1 (2022) <https://doi.org/10.55254/1835-1492.1515>.

[31] Luis Espejo and others, 'A Systematic Review on Unique Characteristics of Generation Z and Their Impact on Purchasing Decisions', *Journal of Ecohumanism*, 4.1 (2025), 12–25 <https://doi.org/10.62754/joe.v4i1.4079>.

[32] Nihal Yurtseven and Şirin Karadeniz, 'An Overview of Generation Alpha', *The Teacher of Generation Alpha*, 2020, 11–31.

[33] Nihal Yurtseven, 'The Teacher of Alpha', February 2020, 2021; Yurtseven and Karadeniz.

technology, so they are used to using it in daily life such as mobile phones, tablets, and accessing the internet[34] [35] [36]. The peak of technology use occurred during the covid 19 pandemic which made this generation learn remotely using gadgets[37] [38]. In addition, parents of this generation and their environment also use technology which causes curiosity so that the desire to use technology arises. This makes them distant from social life and less interacting with the surrounding environment[39]. Several researchers have also conducted research on the impact of gadget use on children and some have researched, especially the impact during the covid pandemic. Research shows that the use of gadgets in children has a great impact on their growth and development and also results in addiction so that some children have problems with their vision organs[40].

2. Ease of Information

The ease of accessing information owned by the alpha generation can help them become more independent in finding answers to questions[41] [42] [43] [44]. In addition, the ease of access to this information can also support the development of cognitive function. Getting used to gadgets makes it easier for this generation to access information and get instant reading sources from the internet (google)[45]. This keeps them away from books.

Even if they want to get a book, they download it on the internet in the form of an e-book (electronic book) but don't necessarily read everything. This generation tends to have a short attention span or focus so that it affects less interest in reading. Several studies have been conducted showing that students' interest in reading books is still low. According to UNESCO, only 0.001% of Indonesian people have an interest in reading. This means that out of 1000 Indonesians, only 1 person likes and actively reads. Some of the factors that cause low interest in reading are that there are no habits formed from an early age, facilities such as public libraries are still minimal, and the lack of production of books that are attractive to children. In fact, reading or literacy will make a positive contribution to building creativity and innovation, as well as improving social skills and skills.

3. Don't like being limited by rules

Generation Alpha doesn't like to be limited by rules because they have unlimited perspectives due to their proximity to the digital world[46] [47] [48] [49]. They are more likely to make decisions over themselves. This generation is also known to love freedom, which means they like to express things without many rules, such

[34] Anne Syomwene, 'European Journal of Education Studies', *European Journal of Education Studies*, 7.1 (2020), 326–37 <https://doi.org/10.5281/zenodo.3627158>.

[35] Yurtseven and Karadeniz.

[36] Yurtseven and Karadeniz.

[37] Blandína Šramová and Jiří Pavelka, 'Generation Alpha Media Consumption During Covid-19 and Teachers' Standpoint', *Media and Communication*, 11.4 (2023), 227–38 <https://doi.org/10.17645/mac.v11i4.7158>.

[38] Russell M. Viner and others, 'School Closure and Management Practices during Coronavirus Outbreaks Including COVID-19: A Rapid Systematic Review', *The Lancet Child and Adolescent Health*, 4.5 (2020), 397–404 <https://doi.org/10.1016/S2352-4642(20)30095-X>.

[39] Shanmugampillai Jeyarajaguru Kabilan, 'Teaching and Learning in the Metaverse World: The Future of New-Gen Education', *Journal of Engineering Education Transformations*, 37.1 (2023), 134–41 <https://doi.org/10.16920/jeet/2023/v37i1/23139>.

[40] Wong-Lo and Chan.

[41] Perry.

[42] Yurtseven.

[43] Yurtseven and Karadeniz.

[44] Rushan Ziatdinov and Juanee Cilliers, 'Generation Alpha: Understanding the Next Cohort of University Students', *European Journal of Contemporary Education*, 10.3 (2021), 783–89 <https://doi.org/10.13187/ejced.2021.3.783>.

[45] Gürsu Aşik, 'Measurement and Evaluation in Alpha Classes', *The Teacher of Generation Alpha*, 2020, 109–18.

[46] Perry.

[47] Yurtseven and Karadeniz.

[48] Yurtseven.

[49] Yurtseven and Karadeniz.

as in freedom of opinion and creativity[50] [51]. They love to explore so they don't like to be limited by rules. In games, they also like to play online games, play drones while generations Y and Z used to still play kites and other traditional games.

4. High Confidence

Generation Alpha is often associated with a high self-confidence trait [52] [53]. Generation Alpha also has leadership traits and a tendency to dominate situations [54]. High self-confidence is a positive thing that must be developed and supported by parents and people around them in order to develop their potential. In a school environment, high self-confidence can make students brave and highly motivated to face various academic and social challenges. In this context, positive and negative self-concepts have a significant role in shaping students' confidence. However, overconfidence can also have negative impacts, such as damaging ego and reputation, as well as being overwhelmed in doing work.

5. Instans generation

The alpha generation is used to devices such as smartphones, tablets, and fast internet access from an early age. Because they are accustomed to the ease of access to information and instant digital services, they tend to develop a preference for things that are fast and efficient[55] [56] [57]. This instant culture was formed because various aspects of their lives have been supported by technology that makes the process easier, such as learning, playing, and communicating. For example, they can search

for information or answers with just one type in a search engine or use an application that instantly gives answers. This pattern is also reflected in the preference for short, straight to the point of visual content, such as short videos on social media. However, this characteristic does not mean that the Alpha generation is not able to be patient or process complex things, but rather the mindset that has been formed by an environment that offers easy access. Another example is that in buying food, they prefer to order through applications such as gofood or grabfood or shop online. The habit of online shopping is also influenced by the behavior of their parents who are used to it so they also do the same[58]. Their principle is, if something is easy, why should they look for something difficult. Therefore, they love practical problem-solving.

6. Always want to be recognized

Generation alpha likes to be praised and rewarded for whatever they do, especially if they manage to do something, even if what is done is a small thing[59] [60]. But according to them, it also needs to be acknowledged[61]. Generation Alpha grew up in the era of social media and technology that allows them to share and get responses from the public very easily. They often see people around them, both peers and public figures, getting recognition or validation in the form of likes, comments, or followers on various platforms. This creates a mindset that social recognition is important. This desire to be recognized can be driven by several factors. One of them is their exposure to social media culture which places a lot of emphasis on self-

---

[50] Joni Manumpak Parulian Gultom, 'Protestant Church Strategy in Building Spiritual Identity for Generation Alpha', *Verbum Vitae*, 41.4 (2023), 1027–46 <https://doi.org/10.31743/vv.16531>.

[51] Ziatdinov and Cilliers.

[52] Yurtseven and Karadeniz.

[53] Yurtseven.

[54] Wong-Lo and Chan.

[55] Wong-Lo and Chan.

[56] Yurtseven and Karadeniz.

[57] Yurtseven.

[58] Derbani, Adawiyah, and Wulandari.

[59] Yurtseven and Karadeniz.

[60] Yurtseven.

[61] The American Psychological Association (APA), 'Stress in America™ Generation Z. Stress in America Survey.', *American Psychological Association*, October, 2018, 1–11 <https://www.apa.org/news/press/releases/stress/2018>.

image and publicly uploaded achievements. As a result, they tend to seek validation or external recognition, which gives them a feeling of being accepted and valued. In addition, this encouragement can also be a way for them to build their identity in the midst of such a rapid flow of information and communication. However, the desire to be recognized is not always negative. If directed correctly, this can be a motivation to work, achieve, and develop self-skills.

3. Teachers' Challenges in Teaching Generation Alpha Students

The rapid development of technology has become an integral part of the alpha generation, especially related to their personality and intelligence. However, most of the teachers who teach the current alpha generation are in generation X, which means the character of teachers and students is different.

Table 1. Development of Generation Groups[62]

Tahun	Nama Generasi
1925 -1946	Veteran Generation
1946 - 1960	Baby Boom Generation
1960 - 1980	X Generation
1980 - 1995	Y Generation
1995 - 2010	Z Generation
2010	Alpha Generation

Teachers must be ready to face the changes in the era that they will face. Therefore, it is very important to know what challenges teachers will face. The alpha generation is growing up in the increasingly advanced digital era, all aspects of their lives have been integrated with technology. This is a unique challenge for teachers so it requires a deep understanding of how to learn and interact with alpha generation students.

a) Teachers must adapt and master technology quickly

The alpha generation has a high level of digital literacy because since childhood they have been accustomed to technological devices. Therefore, teachers must adapt to technology and be proficient and skilled in using technological devices in order to create relevant and engaging learning experiences for students[63][64].

b) Lack of focus on learning

With the ease of access to information and technological devices today, it is often found that children engage in digital activities during learning hours. They are growing in the age of fast information and a variety of devices that provide instant entertainment, such as social media, short videos, and interactive games[65]. As a result, they are used to content that changes quickly, so their attention span can be shorter than previous generations[66][67]. The habit of multitasking also affects their focus[68]. For example, they often do more than one activity at a time, such as studying while listening to music or using other devices that can reduce the effectiveness of learning. In addition, the "instant" mindset that develops due to the ease of technology can make them less patient in delving into topics or tasks that require in-depth understanding. However, this does not mean that the Alpha generation is unable to focus.

c) Differences in student's learning styles

Generation Alpha has a different learning style because they grew up in an environment of advanced technology and very easy access to information. They tend to be more responsive to visuals, interactivity, and experiential learning compared to traditional, more passive methods. This generation prefers fast, dynamic,

---

[62] Yurtseven and Karadeniz.

[63] Yurtseven and Karadeniz.

[64] Yurtseven.

[65] Dóra Szabó and Erzsébet Dani, 'Smartphones and Social Media as Status Symbol of Gen Z', *Folia Toruniensia*, 22 (2022), 87–111 <https://doi.org/10.12775/FT.2022.005>.

[66] Yurtseven and Karadeniz.

[67] Yurtseven.

[68] Sekala and others.

and technology-involved learning such as videos, educational apps, and educational games[69] [70]. They also enjoy the way of learning that allows for independent exploration, giving them the opportunity to be actively involved in the learning process. Therefore, teachers must have flexibility in presenting learning materials according to the needs and learning styles of students[71].

d) Preparing the alpha generation to be globally competitive

The development of technology has made changes in all aspects including employment. This makes the competition in finding a job even tighter. Teachers must be able to prepare them for a future that is able to compete on a national and global scale.

e) Teachers must be mentors and inspirations for alpha generation students

As educators of the Alpha generation, teachers need to develop their role not only as teachers, but also as mentors and sources of inspiration. Generation Alpha tends to want a more personal and collaborative approach to their learning process.

4. Teachers' Strategies in Dealing with Generation Alpha Students

Strategies that teachers can do in preparing themselves to face alpha generation students are as follows:

1) Participate in various technology mastery trainings

Strategies that teachers can do to be able to master technology are to take part in various technology mastery trainings and apply them in learning. Generation Alpha, who have been familiar with technology since childhood, have different expectations when it comes to learning than previous generations. They are used to quick access to information, interactive visual media, and

a variety of apps that offer a more engaging and accessible learning experience. This makes them tend to be more interested in learning methods that use technology than traditional methods. Therefore, teachers need to adapt and master technology quickly to bridge the learning needs of the Alpha generation. Teachers who master technology can create a more engaging, relevant, and interactive learning experience. For example, the use of digital learning platforms, educational videos, and interactive applications can make subject matter easier to understand and attract students' attention. By mastering technology, teachers can not only deliver material in a way that students love, but it can also help them utilize technology to develop critical, creative, and collaborative thinking skills. This adaptation is crucial to maintain the relevance of education in the digital era and ensure that Alpha generation students get learning that is in line with the times and their needs.

2) Implementing an engaging and innovative learning model

Strategies that teachers can do are to create an interactive learning environment, use media that suits their preferences, and provide opportunities to take breaks between learning sessions, so that their focus can be improved. Therefore, teachers must be able to apply these strategies to maintain students' focus and concentration during learning. Especially the understanding in the wiser use of technology. Teachers can also apply learning models that are interesting and motivate students such as inserting stories in the middle of the material, making games that require children's concentration such as

---

[69] Yurtseven and Karadeniz.
[70] Yurtseven.

[71] Sekala and others.

guessing games, memory games, chain messages and so on. Teachers must be creative in choosing the learning model to be applied. Several learning models that are able to increase students' focus on learning and increase student motivation such as discovery learning, problem-based learning and project-based learning.

3) Implement a multimodal and differentiated approach

Strategies that can be applied by teachers are to apply a multimodal approach and differentiated learning, which is to combine learning styles in one session such as presenting information or materials in various formats, conducting joint learning by forming discussion groups and then giving assignments or case studies to encourage collaboration and provide flexible but structured time. Teachers must also master various forms of other learning models that encourage student participation with other different learning styles.

4) Guiding students to master 21st century skills

The strategy that teachers can do is to familiarize students by developing 21st century skills, namely the 4Cs (critical thingking, creativity, collaboration and communication). The ability to communicate in international languages, especially English, will open up wider opportunities for the Alpha generation to compete at the global level. In addition to English, the introduction of other foreign languages can also add more value. In addition to technical skills, the Alpha generation also needs to have attitudes such as discipline, responsibility, and good work ethics. This will help them in socializing, respecting cultural differences, and becoming resilient leaders. Teachers must also implement STEM (Sciences,

Technology, Engineering, and Mathematic) based education because they can build the logical and innovative mindset needed to compete in the global industry. It could also drive the interest of the Alpha generation in areas of science that are relevant to future trends, such as artificial intelligence and biotechnology. In order for students to have a national and global interaction experience, student exchange programs, international competitions, and access to global information are needed to provide a broader perspective for the Alpha generation. It helps them understand cultural diversity and global ways of thinking that will be beneficial in the future of work. Teachers must understand the characteristics of alpha generation students so that they know their needs. This is useful for teachers to develop their potential to the fullest and prepare alpha generation students to become highly competitive future leaders.

5) Become a mentor as well as an inspiration for students

Teachers who are mentors and inspirations can meet this need by providing direction, encouragement, and inspiration that help students discover their interests and potential. The alpha generation children watch a lot of comics, video games or animated films in which there are superhero figures who are inspirations for them. Just like teachers, teachers must also take such an approach to be a mentor as well as an inspiration for students. As mentors, teachers can guide students in recognizing their strengths, weaknesses, and interests, while providing guidance for developing specific skills relevant to the modern world. Teachers can also help students overcome learning challenges, teach critical thinking skills, and direct them to relevant resources or projects. This approach makes students feel supported in the learning process, not

just assessed based on academic results. As inspiration, teachers can be an example in terms of work ethics, responsibility, and enthusiasm for learning. The alpha generation is very inspired by figures who can show creative, diligent, and innovative ways of thinking. Teachers who are enthusiastic about the subject matter, open to new ideas, and constantly updating themselves with the development of technology and science can motivate students to cultivate a spirit of learning and dare to try new things. By being mentors and inspirers, teachers not only help the alpha generation learn, but also instill confidence and a positive attitude towards lifelong learning. This is an important foundation for them to face a dynamic and competitive future. The role of teachers as supervisors is needed in handling the character of alpha generation students. Students of this generation should be given a lot of attention and positive reinforcement because they easily lose motivation to learn. Teachers must also give appreciation because this generation really wants to be recognized for their existence.

Conclusion

Based on the research, it can be concluded that the alpha generation has the characteristics of having high technology mastery skills, easy access to information, high confidence, not like to be limited by rules, likes instant and always wants to be recognized. Teachers' challenges in dealing with alpha generation students are that teachers must adapt and master technology quickly, lack of focus in learning, differences in student learning styles, prepare alpha generation students to be able to compete globally, and must be mentors as well as inspirations for students. Strategies that can be carried out by teachers are to participate in various technology mastery trainings and apply them in learning, implement learning models that are interesting and motivate students, apply multimodal approaches and differentiated learning, develop 21st century skills, namely the 4Cs (critical thinking, creative, collaboration and communication), as well as guiding students according to their character and giving attention and helping students in their problems so that teachers can be mentors as well as inspirations for students.

References
Books

Akgün, Ergün, 'Data Literacy to Understand Generation Alpha', *The Teacher of Generation Alpha*, 2020, 133–43

Aşik, Gürsu, 'Measurement and Evaluation in Alpha Classes', *The Teacher of Generation Alpha*, 2020, 109–18

Asiva Noor Rachmayani, 'No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析 Title', 2015, 6

Yurtseven, Nihal, 'The Teacher of Alpha', February 2020, 2021

Yurtseven, Nihal, and Şirin Karadeniz, 'An Overview of Generation Alpha', *The Teacher of Generation Alpha*, 2020, 11–31

Wong-Lo, Mickie, and Clarissa Chan, 'IForgive: The Exploration of Forgiveness in Cyberbullying', *The Psychology of Cyberbullying*, 2024, 245–56

Journal

Children, Happy, *Education and Child Safety*, 2020 https://doi.org/10.1787/421bcc05-en

Cozzaglio, Ilaria, 'Revised Normative Behaviourism: An Experimental Proposal', *Res Publica*, 0123456789, 2024 <https://doi.org/10.1007/s11158-024-09682-y>

Cofer, Charles N., and B. F. Skinner, *The Technology of Teaching*, *The American Journal of Psychology*, 1969, LXXXII <https://doi.org/10.2307/1420451>

Derbani, Adnane, Wiwiek Rabiatul Adawiyah, and Siti Zulaikha Wulandari, 'Impact of Online Buying Behavioral Tendencies of Generation Z on Their Parents' Consumption Behavior: Insight from Indonesia', *Innovative Marketing*, 18.2 (2022), 39–48 <https://doi.org/10.21511/im.18(2).2022.04>

Espejo, Luis, Nelly Perez, Cecilia Mendoza, and Yuri Gagarín, 'A Systematic Review on Unique Characteristics of Generation Z and Their Impact on Purchasing Decisions', *Journal of Ecohumanism*, 4.1 (2025), 12–25 <https://doi.org/10.62754/joe.v4i1.4079>

Gultom, Joni Manumpak Parulian, 'Protestant Church Strategy in Building Spiritual Identity for Generation Alpha', *Verbum Vitae*, 41.4 (2023), 1027–46 https://doi.org/10.31743/vv.16531

Habsy, Bakhrudin All, Karina Apriliya, Alifia Febriana Putri, and Gian Salsabilla Aprilyana, 'Penerapan Teori Belajar Behaviorisme Dan Teori Belajar Sosial Bandura Dalam Pembelajaran', *Tsaqofah*, 4.1 (2023), 476–91 <https://doi.org/10.58578/tsaqofah.v4i1.2211>

Kabilan, Shanmugampillai Jeyarajaguru, 'Teaching and Learning in the Metaverse World: The Future of New-Gen Education', *Journal of Engineering Education Transformations*, 37.1 (2023), 134–41 <https://doi.org/10.16920/jeet/2023/v37i1/23139>

Khalid, Ika Liana, Mohd Nor Syahrir Abdullah, and Hidayah Mohd Fadzil, 'A Systematic Review: Digital Learning in STEM Education', *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 51.1 (2024), 98–115 <https://doi.org/10.37934/araset.51.1.98115>

Leeder, Thomas M., 'Behaviorism, Skinner, and Operant Conditioning: Considerations for Sport Coaching Practice', *Strategies*, 35.3 (2022), 27–32 https://doi.org/10.1080/08924562.2022.2052776

Magiananta, Stevi, M Atho Rohman, Yurika Pipit Widyastanti, Yolla Desi Magdalena, Jauhara Dian, and Nurul Iffah, 'Analisis Teori Behavioristik Dalam Proses Pembelajaran Matematika Pada Siswa MTs Bahrul Ulum Genukwatu', 5475 (2024), 1–8

Moscati, Ivan, 'Behavioural and Heuristic Models Are As-If Models Too – and That's Ok', *Economics and Philosophy*, 2023, 1–31 https://doi.org/10.1017/s0266267123000093

Perry, Graeme, 'Generation Alpha: Understanding Our Children and Helping Them Thrive', *TEACH Journal of Christian Education*, 16.1 (2022) <https://doi.org/10.55254/1835-1492.1515>

Roche, Joseph, Laura Bell, Cecília Galvão, Yaela N. Golumbic, Laure Kloetzer, Nieke Knoben, and others, 'Citizen Science, Education, and Learning: Challenges and Opportunities', *Frontiers in Sociology*, 5. December (2020), 1–10 <https://doi.org/10.3389/fsoc.2020.613814>

Sánchez, Alfonso Freire, Jesús López-González, and Sergio Rodríguez López-Ros, 'Intergenerational Differences on the Cultural Imagery of AI in the Storytelling and Iconicity of Animated Films for Children and Young People', *Revista Latina de Comunicacion Social*, 2025.83 (2025), 1–18 <https://doi.org/10.4185/rlcs-2025-2303>

Sekala, Agnieszka, Ole Schultz, Krzysztof Foit, and Tomasz Blaszczyk, 'Technical Education for Industry 4.0: Generation Z's Motivation to Study Technical Subjects - a Comparative Study of Selected Universities in Denmark and Poland', *EAEEIE 2023 - Proceedings of the 2023 32nd Annual Conference of the European Association for Education in Electrical and Information Engineering*, 2023, 10181671 <https://doi.org/10.23919/EAEEIE55804.2023.10181671>

Slife, Brent, and Richard Williams, 'Science and Human Behavior', *What's Behind the Research? Discovering Hidden Assumptions in the Behavioral Sciences*, 2014, 167–204 <https://doi.org/10.4135/9781483327372.n6>

Šramová, Blandína, and Jiří Pavelka, 'Generation Alpha Media Consumption During Covid-19 and Teachers' Standpoint', *Media and Communication*, 11.4 (2023), 227–38 <https://doi.org/10.17645/mac.v11i4.7158>

Syomwene, Anne, 'European Journal of Education Studies', *European Journal of Education Studies*, 7.1 (2020), 326–37 <https://doi.org/10.5281/zenodo.3627158>

Szabó, Dóra, and Erzsébet Dani, 'Smartphones and Social Media as Status Symbol of Gen Z', *Folia Toruniensia*, 22 (2022), 87–111 <https://doi.org/10.12775/FT.2022.005>

The American Psychological Association (APA), 'Stress in America™ Generation Z. Stress in America Survey.', *American Psychological Association*, October, 2018, 1–11 <https://www.apa.org/news/press/releases/stress/2018>

Tillotson-Chavez, Kate, and Jennifer Weber, 'A New Generation of Citizen Scientists: Self-Efficacy and Skill Growth in a Voluntary Project Applied in the College Classroom Setting', *Citizen Science: Theory and Practice*, 9.1 (2024), 1–18 https://doi.org/10.5334/cstp.641

Viner, Russell M., Simon J. Russell, Helen Croker, Jessica Packer, Joseph Ward, Claire Stansfield, and others, 'School Closure and Management Practices during Coronavirus Outbreaks Including COVID-19: A Rapid Systematic Review', *The Lancet Child and Adolescent Health*, 4.5 (2020), 397–404 <https://doi.org/10.1016/S2352-4642(20)30095-X>

Zagaria, Andrea, and Luigi Lombardi, 'A New Perspective on Trends in Psychology', *New Ideas in Psychology*, 74. March (2024), 101078 <https://doi.org/10.1016/j.newideapsych.2024.101078>

Ziatdinov, Rushan, and Juanee Cilliers, 'Generation Alpha: Understanding the Next Cohort of University Students', *European Journal of Contemporary Education*, 10.3 (2021), 783–89 <https://doi.org/10.13187/ejced.2021.3.783>

Ziff, Paul, 'About Behaviorism', *Analysis (United Kingdom)*, 18.6 (1958), 132–36 https://doi.org/10.1093/analys/18.6.132